

CLAIMS

1. System for remote control of equipment enabling interconnection between at least one server and at least one remote equipment using the MQIsdp protocol, characterised in that it associates, with at least one of the said remote equipment, radiocommunication means capable of sending and receiving AT type commands sent by and / or to be sent to an external application used by the said remote equipment,
 - 5 and in that the said radiocommunication means are provided with a set of special AT commands for exchanging data with at least one server using the said MQIsdp protocol,
 - 10 so as to enable an interconnection between the said server(s) and the said remote equipment through the said radiocommunication means, without requiring knowledge of the said MQIsdp protocol in the said remote equipment.
2. System for remote control of equipment according to claim 1, characterised in that in at least a first mode, the said radiocommunication means only manage signalling of a data exchange, the said data being transferred directly from remote equipment to a server, or vice versa.
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3. System for remote control of equipment according to any one of claims 1 and 2, characterised in that in at least a second mode, the said radiocommunication means manage signalling of a data exchange and transfer of the said data, the data being temporarily stored in at least one buffer memory.
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4. System for remote control of equipment according to claim 3, characterised in that the size of the said buffer memory(ies) is parameterable.
5. System for remote control of equipment according to claims 2 and 4, characterised in that it operates in the said first mode when the size of the said buffer memory(ies) is equal to 0, and otherwise in the said second mode.
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6. System for remote control of equipment according to any one of claims 1 to 5, characterised in that the said radiocommunication means comprise a radiocommunication module comprising all radio frequency and base band data

processing means on the same substrate, together with means of managing the said AT commands.

7. System for remote control of equipment according to any one of claims 1 to 6, characterised in that the said radiocommunication means include the said 5 MQIsdp protocol in the form of an "open-AT" application defining the said set of special AT commands.

8. System for remote control of equipment according to any one of claims 1 to 7, characterised in that the said set of special AT commands includes commands for:

10 - connecting to one of the said servers;
- sending messages;
- receiving messages.

9. System for remote control of equipment according to any one of claims 1 to 8, characterised in that at least some of the said special AT commands are 15 organised so as to be able to perform at least two functions and / or to act on at least two distinct aspects, as a function of a predefined configuration.

10. System for remote control of equipment according to any one of claims 1 to 9, characterised in that the said set of commands only includes 8 commands.

11. System for remote control of equipment according to any one of claims 1 to 10, characterised in that the said set of special AT commands includes a 20 configuration command used to define communication parameters with one of the said servers.

12. System for remote control of equipment according to claim 11, characterised in that it uses a single configuration command (+WSPGSET) for 25 configuration of radiocommunication aspects and the general configuration of aspects related to the MQIsdp protocol.

13. System for remote control of equipment according to any one of claims 11 and 12, characterised in that the said configuration command can be used to select one of at least two transmission modes (GSM or GPRS).

30 14. System for remote control of equipment according to any one of claims 1 to 13, characterised in that the system uses three configuration commands:

- a general communication configuration command (+WSPGSET);
- a connection configuration command (+WSPCSET), particularly used to specify the coordinates of a server;
- a configuration command for the "will" configuration message

5 (+WSPWMS), particularly to specify the channel to which a message will be sent.

15. System for remote control of equipment according to any one of claims 1 to 14, characterised in that it uses at least one general communication command for sending and / or receiving messages using the MQIsdp protocol.

16. System for remote control of equipment according to claim 15,
10 characterised in that it uses five general communication commands:

- a command for specifying an MQIsdp context (+WSPDCONT);
- a command for managing a connection with a server (+WSPCONM);
- a command for sending a message (+WSPMSG);
- a command for receiving a message (+WSPRMSG);
- 15 - an administration command, used to do a reset and / or return to the default values of a set of parameters (+WSPPA).

17. System for remote control of equipment according to any one of claims 1 to 16, characterised in that it uses at least one query command by an external application

20 18. System for remote control of equipment according to claim 17, characterised in that it uses two query commands by an external application, on the following in turn:

- the current state of the connection (+WSPICON);
- reception and / or sending of a message (+WSPIMSG).

25 19. Device for remote control of equipment enabling interconnection between at least one server and at least one remote equipment according to the MQIsdp protocol,

characterised in that it associates, with at least one of the said remote equipment, radiocommunication means capable of sending and receiving AT type
30 commands sent by and / or to an external application used by the said remote equipment,

and in that it uses a set of special AT commands in the said radiocommunication means for exchanging data with at least one server using the said MQIsdp protocol,

5 so as to enable an interconnection between the said server(s) and the said remote equipment through the said radiocommunication means, without requiring additional processing and / or data formatting means in the said remote equipment.

20. Radiocommunication device, characterised in that it includes radiocommunication means used in a system for remote control of equipment according to any one of claims 1 to 18.

10 21. Radiocommunication module according to any one of claims 1 to 17, characterised in that it includes radiocommunication means used in a system for remote control of equipment according to any one of claims 1 to 18.

15 22. Set of AT commands used in a system for remote control of equipment, characterised in that it enables data exchange with at least one server using the said MQIsdp protocol.